







About the Cover

The technical area during the Manhattan Project (back cover) and the sparkling new Nicholas C. Metropolis Center for Modeling and Simulation (front cover) are symbols of reflection and renewal. These themes reverberate through this anniversary volume, celebrating 60 years of service to the nation. The volume presents a portrait of the Laboratory's main activities—ensuring the safety and reliability of the nation's nuclear stockpile; reducing the threat of weapons of mass destruction, proliferation, and terrorism; solving national problems in defense, energy, environment, and infrastructure; and providing the intellectual foundations for our missions through strategic investments in cutting-edge research. (Upper left) High-resolution modeling of ocean circulation, including the mesoscale eddies that redistribute energy, is providing the first accurate models of the Gulf Stream and other critical flows that determine climate. (Upper right) The FORTÉ satellite, developed at Los Alamos as a test bed for the next generation of broadband radio-frequency (rf) sensors, was launched in 1997 and is still in orbit. The Los Alamos broadband sensors not only monitor the sky for possible signals from nuclear detonations but detect the rf signatures of terrestrial lightning. (Bottom) The containment vessel in the proton radiography line at the Los Alamos Neutron Science Center confines dynamic experiments relating to the early stages of nuclear weapons performance. Highprecision radiographs of the experiment are made with energetic protons instead of x-rays.

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